

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Withdrawn – Currently Amended): An assembly ~~Assembly~~ allowing the manufacture of a hollow mechanical part by diffusion bonding and superplastic forming, comprising:

[[~~-~~]] a stack of at least two primary parts having two faces and a periphery, the ~~said~~ primary parts being joined together around their ~~said~~ periphery with the exception of a place forming a passage so as to define between the two of them a cavity, and the ~~said~~ primary parts having, facing the ~~said~~ cavity, at least one face that is covered, in a pattern, with a stop-off product containing a binder that can be thermally degraded; and

[[~~-~~]] a sealed reservoir having an internal space and an open end, the ~~said~~ end being joined in a sealed manner to the ~~said~~ passage in the ~~said~~ stack so as to allow communication between the ~~said~~ internal space of the ~~said~~ reservoir and the ~~said~~ cavity, the reservoir being placed under a partial vacuum, this being produced so as to be non-deformable at the temperature and at the pressure at which the diffusion bonding of the ~~said~~ stack takes place and having a volume such that, when the ~~said~~ assembly is at the thermal degradation temperature of the ~~said~~ binder, the gases resulting from the degradation of the binder are sucked up into the reservoir.

Claim 2 (Withdrawn – Currently Amended): The assembly ~~Assembly~~ according to claim 1, wherein the ~~said~~ mechanical part is a hollow turbomachine blade, in particular a fan rotor blade, and ~~in that~~ the ~~said~~ stack comprises three primary parts composed of a suction side primary part, a central plate and a pressure side primary part.

Claim 3 (Withdrawn – Currently Amended): The assembly ~~Assembly~~ according to claim 1, wherein said reservoir is made from a nickel-based or cobalt-based metal alloy.

Claim 4 (Withdrawn – Currently Amended): The assembly ~~Assembly~~ according to claim 1, wherein said volume of the reservoir is between 10 and 100 times the volume of the ~~said~~ cavity in the stack.

Claim 5 (Withdrawn – Currently Amended): The assembly ~~Assembly~~ according to claim 1, wherein said reservoir is placed under a partial vacuum of between 0.01 and 0.1 Pa, preferably between 0.03 and 0.07 Pa.

Claim 6 (Withdrawn – Currently Amended): A use ~~[[Use]]~~ of the ~~[[an]]~~ assembly according to claim 1, for extracting the gaseous residues present in a cavity that separates at least two primary parts intended to be joined together by diffusion bonding for the purpose of obtaining, after superplastic forming, a hollow mechanical part.

Claim 7 (Currently Amended): A process ~~Process~~ for manufacturing a hollow mechanical part by diffusion bonding and superplastic forming, comprising ~~the following~~ steps:

a) providing at least two primary parts ~~are provided~~, said two primary parts having two faces and a periphery;

b) depositing a stop-off product ~~is deposited~~ in a predefined pattern on at least one face among each pair of those faces of the ~~said~~ primary parts that are intended to face each other;

c) providing a sealed reservoir having an open end ~~is provided~~, the ~~said~~ reservoir being produced so as to be non-deformable at the temperature and pressure at which the material of the ~~said~~ primary parts undergoes diffusion bonding;

d) joining said primary parts ~~are joined~~ together around their ~~said~~ periphery with the exception of a place forming a passage, the ~~said~~ primary parts forming a stack and defining, pairwise between them, a cavity that communicates with the ~~said~~ passage;

e) placing the stack and the reservoir ~~are placed~~ in a chamber under a partial vacuum of the chamber, thereby the internal volume of said reservoir is placed under a partial vacuum;

f) making a sealed join ~~is made~~ between the ~~said~~ open end of said reservoir and the ~~said~~ passage of the ~~said~~ stack in the ~~said~~ chamber under partial vacuum, so as to form an assembly allowing communication between the ~~said~~ internal space of the ~~said~~ reservoir and the ~~said~~ cavity;

g) heating said chamber ~~is heated~~ to the thermal degradation temperature of the ~~said~~ binder, thereby allowing the gases resulting from the degradation of the binder to be sucked into the reservoir;

h) heating said chamber ~~is heated~~ to the diffusion bonding temperature and pressurized to the diffusion bonding pressure, which causes said stack to undergo hot isostatic pressing diffusion bonding;

i) separating said reservoir ~~is separated~~ from the bonded stack;

j) placing the ~~said~~ bonded stack ~~is placed~~ in a mould; and

k) bringing the ~~said~~ mould ~~is brought~~ to the superplastic forming temperature and an inert gas is injected under the superplastic forming pressure via the ~~said~~ passage in the ~~said~~ cavity, whereby the stack undergoes inflation and superplastic forming, allowing a blank of the mechanical part to be obtained.

Claim 8 (Currently Amended): The manufacturing ~~Manufacturing~~ process according to claim 7, wherein said ~~step d)~~ for joining the primary parts and the ~~said step d)~~ for making the sealed join are carried out by electron beam welding.

Claim 9 (Currently Amended): The manufacturing ~~Manufacturing~~ process according to claim 7, wherein said partial vacuum is between 0.01 and 0.1 Pa, preferably between 0.03 and 0.07 Pa.

Claim 10 (Currently Amended): The manufacturing ~~Manufacturing~~ process according to ~~any one of~~ claim 7, wherein said mechanical part is a hollow turbomachine blade, in particular a fan rotor blade, and wherein the ~~said~~ stack comprises three primary parts that are made up of a suction side primary part, a central plate and a pressure side primary part.